Adobe Photoshop 7.0 Restoration & Retouching Tutorials
Supplemental information for the book *Photoshop Restoration & Retouching* by Katrin Eismann

QuickKeys
Tap the J on your keyboard to access the Healing Brush
*Shift J cycles between the Healing Brush and Patch Brush*
Macintosh option = PC alt
Macintosh command = PC Control
Macintosh Control = PC Right mouse button

---

1. What is the Healing Brush & How does it Work?

1.) The Healing Brush is an intelligent paint brush that is similar to the Clone Stamp tool only in terms that you sample from one image area by option (Mac)/alt (PC) clicking on a source area and then paint to cover up blemishes, wrinkles, scratches, or image damage.
2.) When the Healing Brush samples it "looks" at the texture, color, and luminosity of the source area separately. Then when you paint it merges the texture from the sample area into the color and luminosity of the destination area.
3.) To create a seamless merge i.e. retouch the Healing Brush spreads out by10-12 pixels around the brush. This is an important tidbit of information to keep in mind when using the Healing Brush. Due to this built-in spread it is recommended to use a hard-edged brush when using the Healing Brush.
4.) The Healing Brush can only work on layers with actual pixel information i.e. the background layer or layers with pixel data. This means that you cannot use one of my favorite Clone Tool techniques of adding an empty layer, checking *Use All Layers* in the Option bar and healing onto the empty layer. To work around this detail I suggest that you generously select the area to be healed and copy it onto a new layer (Layer > New > Layer Via Copy) or command/control J and then lock the layer into position by clicking on the small lock on the top of the layers palette as seen in figure 1.
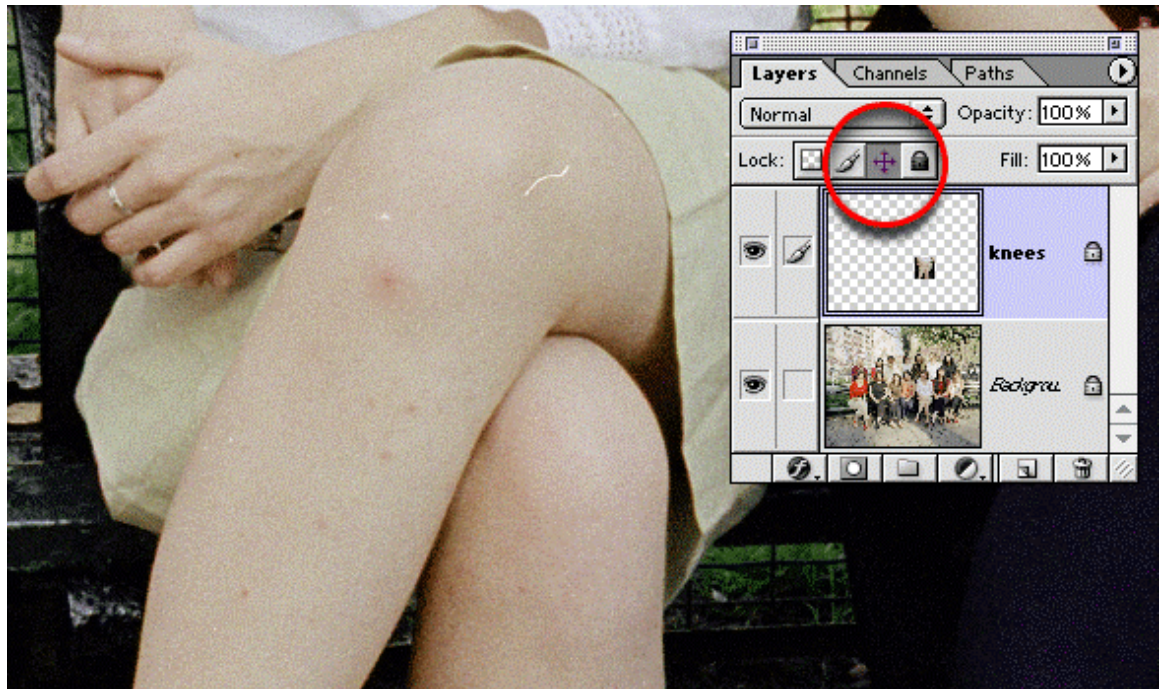
Duplicating a part of the image and then locking the layer into position allows you to heal on separate layers and avoids working on the Background layer.

5.) You can heal with an image source by option/alt clicking to sample from any open image.
6.) You can also heal with a pattern as discussed in *Document 3: Beyond the Fundamentals.*
7.) Notice in the Healing Brush Options Bar – there are fewer Blending Mode choices and no control over opacity. The 'missing' Blending Modes and opacity controls that are available in the other painting tool and layers palette would only interfere with the mathematical calculations of the Healing Brush.
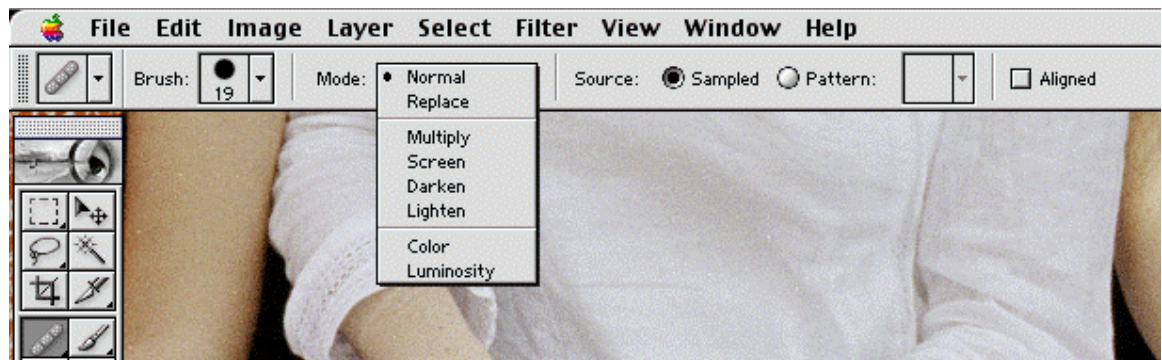

Figure 2: The Blending Modes of the Healing Brush

8.) To recreate opacity controls you can either:
  a. After brushing once with the Healing Brush select Edit > Fade Healing Brush and dial in a desired percentage as seen in figure 3. Please note: If you plan on using this method I suggest that you set up a ƒ key command via the Actions palette to do this for you.
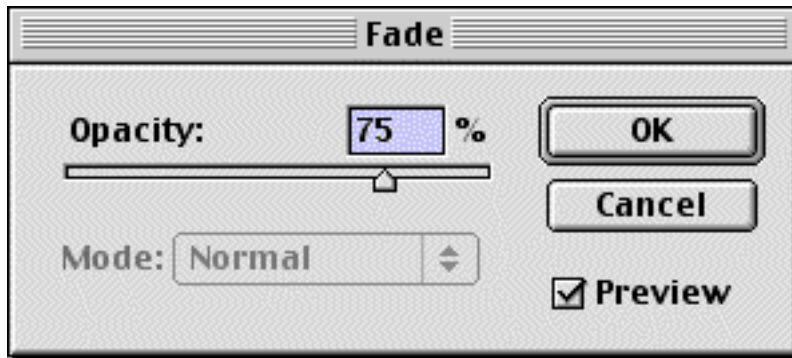
Figure 3: Using the Fade Command to mimic opacity

    b.   Use the Opacity Controls of the copied layer. This is especially important when healing portraits of mature or experienced people. It is essential not to remove every single wrinkle or signifier of age and wisdom if you want the person to still look like the person they are. By reducing the opacity of the layer you can heal and still let some to the character of the person show through. *Download heal_01.jpg*
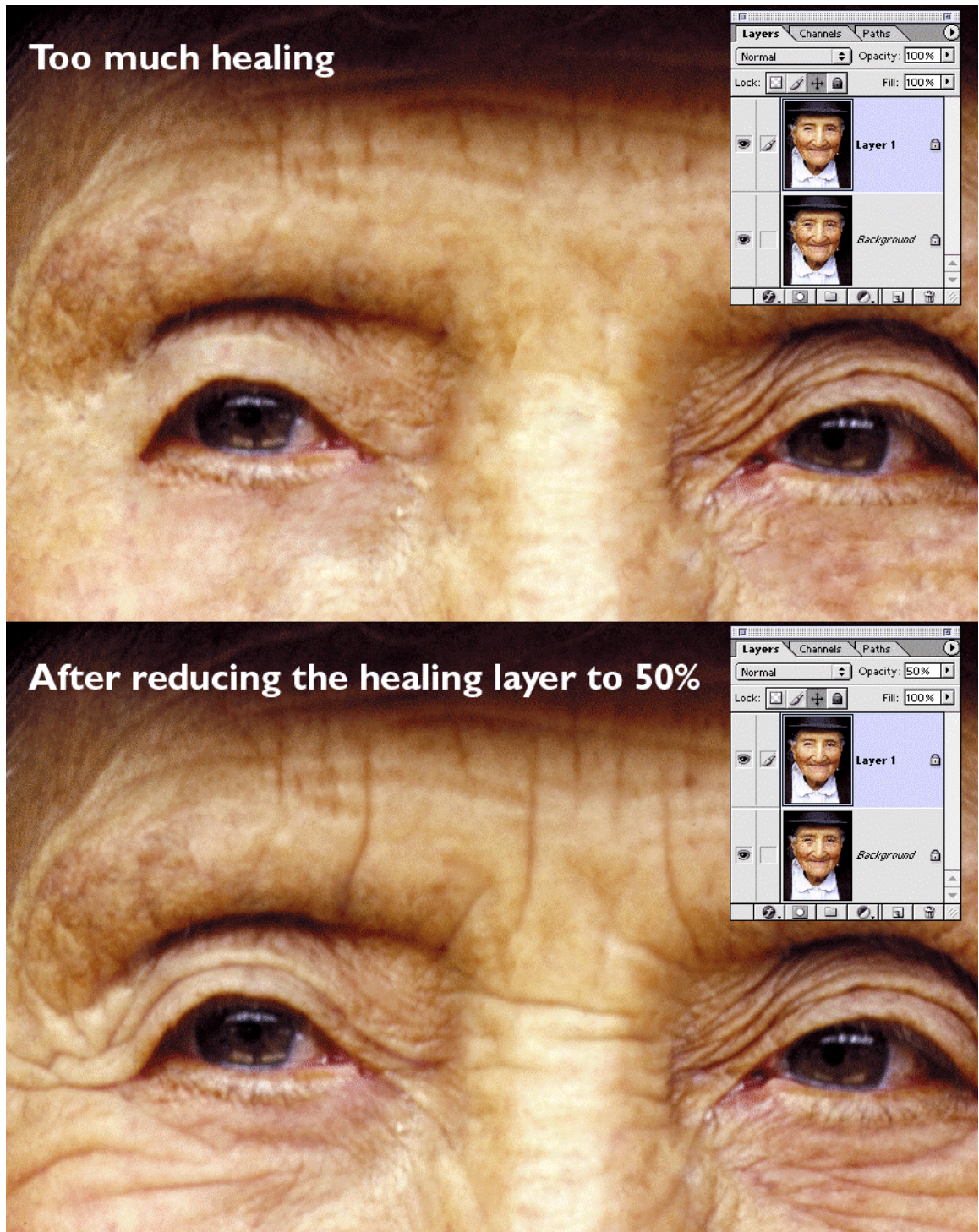
Use layers and layer opacity to let some of the original data show through (above).

9.) The Healing Brush is memory intensive and working with it on large images can be made more pleasant with a fast computer with a lot of RAM . . . how much? As much as you can afford!

2. What isn't the Healing Brush?

1.) The Healing Brush is NOT the Clone Stamp tool. At first this is a difficult thing to keep in mind but it is important that you do. Although you do sample by option/alt clicking the similarity stops there. The CLONE STAMP literally duplicates the clone source and paints it over the original information.

2.) When the Healing Brush samples it "looks" at the texture, color, and luminosity of the source area separately. Then when you paint it merges the texture from the sample area into the color and luminosity of the destination area.

3.) When using the Clone Stamp it is helpful to often resample image areas to avoid the "clone of the clone" patterned look. When using the Healing Brush it is extremely helpful to AVOID this habit of constantly resampling source area. *Sample once & paint often* works MUCH better than constantly sampling. So try to unlearn your CS technique of sampling often – yes, I know that this is difficult at first but keep your left hand away from the option or alt key and you'll be a better healer for it.

3. To Clone or to Heal – that is the question…or is the Clone Stamp dead?

The Clone Stamp is still a useful tool – granted you will be using a lot less often than you did with Photoshop 6 – but it is still a good tool for the following uses;

a) To replace large areas of missing image information. For example, if you're missing a piece of the image, use the Clone Stamp to build up the missing image area and then use the Healing Brush to fine-tune the repair. You see the Healing Brush can't heal onto an area without any image information.

b) To clean up high contrast image areas. Due to the Healing Brush inherent nature of spreading the healing effect by 10-12 pixels image areas that have a high tonal difference tend to get mashed together. As discussed further along in the text you can use a selection to control where the Healing Brush works – but sometimes it is just simpler to grab the tried and true Clone Stamp and clone over image area as seen here. *Download heal_02.jpg*
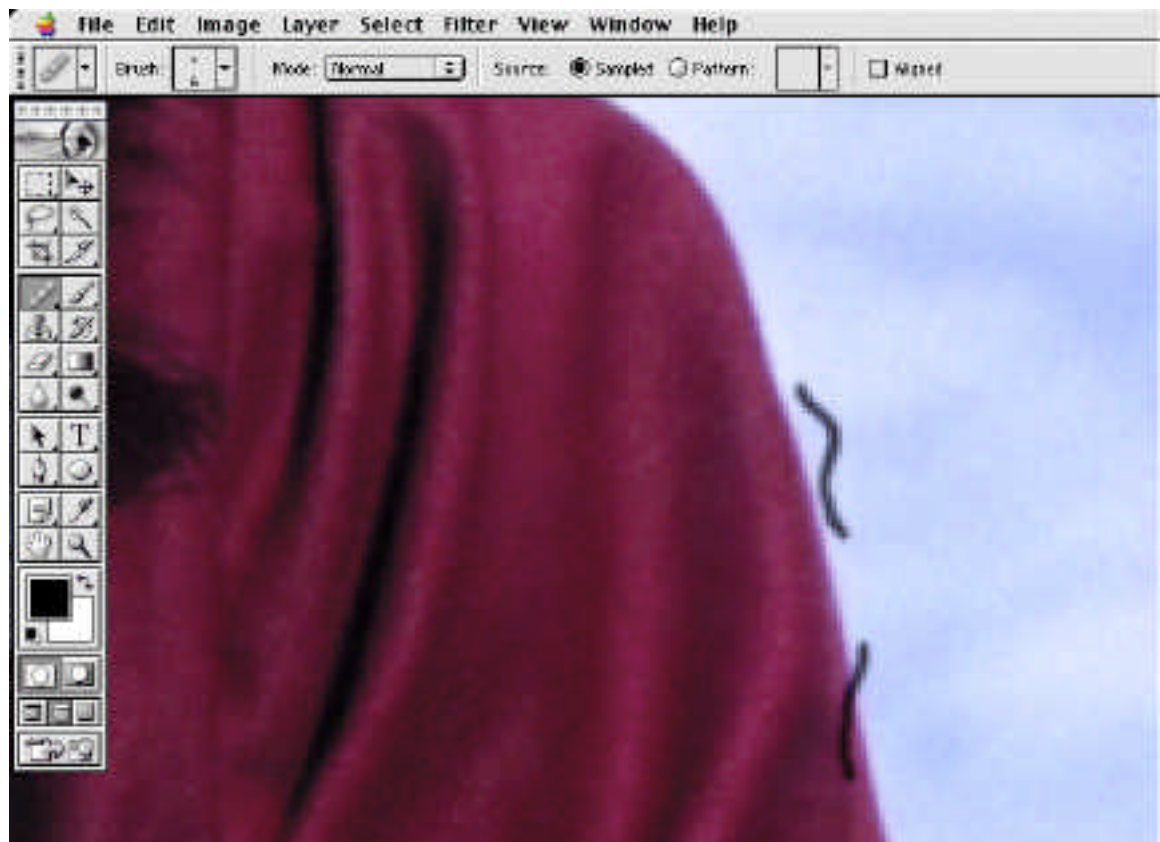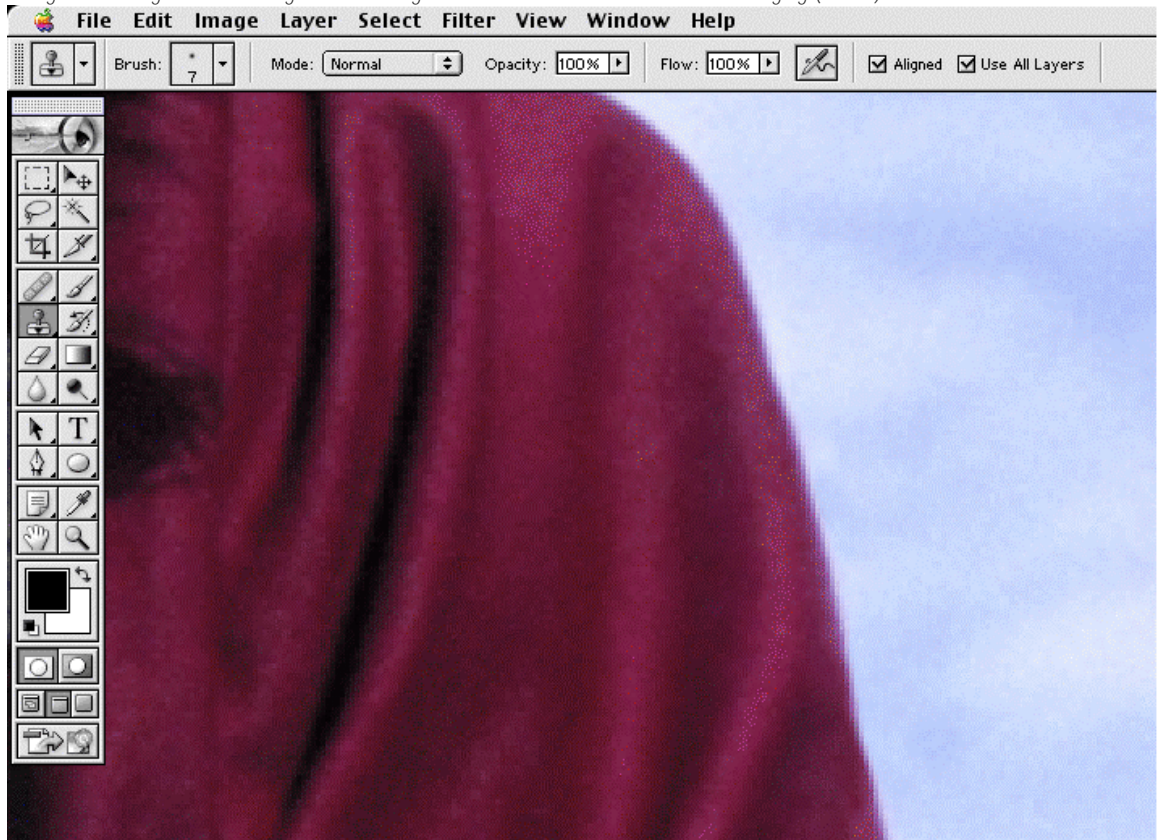

Original Image with dirt and dust (above)

Using the healing brush on image areas with great tonal differences can lead to smudging (above)

Sometimes it is still simpler to use the Clone Tool to quickly remove dirt and damage as seen above.

c) Finally you can still use the Clone Stamp for special effects – such as cloning third eyes onto people. NO, I don't suggest that you do it but I just wanted to let you know that if you need to replicate image areas then the Clone Stamp is the tool of choice for that.

Introduction to Healing Fundamentals: Healing with Sample

1. Open an image that you would like to heal or *download heal_03.jpg* file from the website. Yes, that is a picture of me with a friend on Graduation Day in May 2002.

The original image with a duplicated background layer

2. Start by duplicating the background layer and naming it as seen above.
3. The idea here is to make me look as if I've had some sleep by reducing the dark circles and wrinkles under my eyes. Use a 20 pixel, hard-edged brush and sample from good skin area under my eyes.
4. Avoid the temptation to remove the wrinkles with one fell swoop – rather heal over the wrinkles with half-inch (one centimeter) brush strokes. Upon releasing the mouse Photoshop will heal the area. I've noticed that I often achieve better results with shorter strokes then trying to heal too much at one time.

© 2002. Katrin Eismann www.digitalretouch.org
Article may not be reproduced without prior written permission of the author.
For additional information or to contact the author please write katrin@photoshopdiva.com

5. When using the Healing Brush it is extremely important to study image texture. Notice that the skin on my cheek has more texture than the skin on my forehead i.e. my forehead is smoother. You can often improve a heal by selecting image areas that have the texture you're trying to create. Go ahead and try sampling from my forehead to heal parts of the other eye to achieve the results seen below.
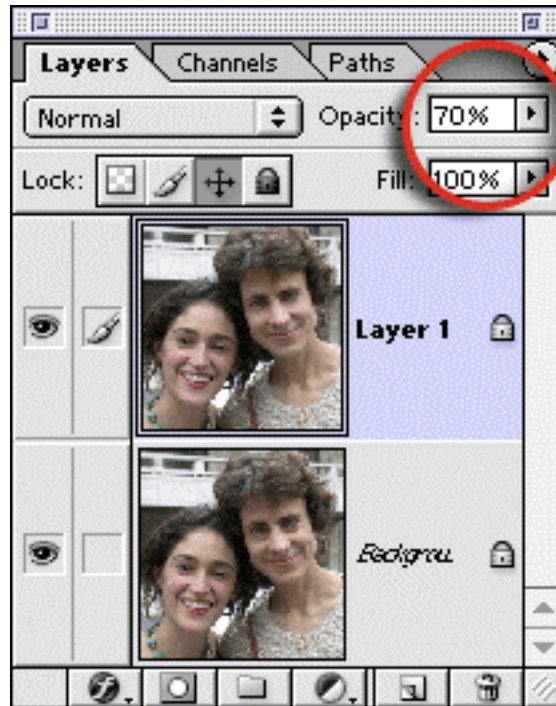

6. Finally, please reduce the contrast around my mouth! (below)

Working with short brush strokes and on a separate layer allows you to heal an image without affecting the background layer.

To avoid the plastic over healed look reduce the opacity of the heal layer to 70 percent as seen below.

_____

In conclusion, the healing brush is a fantastic addition to Photoshop. Keep these following tips in mind when using it and you to will be a healing power user:

- Use a hard-edged brush that is just a bit larger than the area you are healing.
- Use short strokes and release the mouse button in-between strokes to allow Photoshop to heal the area.
- Do not constantly option/alt click to resample new source area.
- Working on layers allows you to control the opacity of the Healing brush
- In case an area looks over healed or fake remember to use the History feature to reverse the process.